Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. **NM0028886**

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Sacramento Methodist Assembly
Post Office Box 8
Sacramento, NM 88347

is authorized to discharge from a facility located at 106 Assembly Circle, Sacramento, Otero County, New Mexico, into an unnamed intermittent stream thence to Agua Chiquita Creek thence to Rio Penasco thence to the Pecos River in Waterbody Segment Code No. 20.6.4.208 of the Pecos River Basin.

Outfall 001: Latitude 32° 47' 30" N, Longitude 105° 33' 30" W

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, III, and IV hereof.

This permit supersedes and replaces NPDES Permit No. NM0028886 issued September 14, 2001.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Issued on

Miguel I. Flores
Director
Water Quality Protection Division (6WQ)

Prepared by

Rudy Molina
Environmental Scientist
Permits Section (6WQ-PP)

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS.

Final Effluent limits - 0.042 mgd design flow.

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge treated sanitary wastewater from outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS Standard Units		MONITORING REQUIREMENTS	
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
PH	00400	6.6	8.8	Once/Month	Grab

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
		lbs/day, unless noted		mg/l, unless noted				
POLLUTANT	STORET CODE	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	Report MGD	Report MGD	***	***	***	Five/Week (*11)	Instantaneous
Biochemical Oxygen Demand, 5-day	00310	10.5	15.8	30	45	N/A	Once/Month	Grab
Total Suspended Solids	00530	10.5	15.8	30	45	N/A	Once/Month	Grab
Fecal Coliform Bacteria	74055	N/A	N/A	200 (*1, 2)	N/A	400 (*1, 2)	Once/Month	Grab
E. coli Bacteria (*3, 4)	51040	N/A	N/A	Report (*1, 5)	N/A	Report (*1, 5)	Once/Month	Grab
E. coli Bacteria (*3, 6)	51040	N/A	N/A	126 (*1, 5)	N/A	410 (*1, 5)	Once/Month	Grab
Total Residual Chlorine	50060	N/A	N/A	N/A	N/A	11 ug/l (*8)	Five/week	Instantaneous Grab (*8)

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (7-day Chronic)	30-DAY AVG	48-HR MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Pimephales promelas	Report	Report	Once Per Permit (*9, 10)	Grab
Ceriodaphnia dubia	Report	Report	Once Per Permit (*9, 10)	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Sampling Location

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment unit.

Footnotes

*1 Colony forming units (cfu) per 100 ml.

*2 The permittee shall continue monitoring for both fecal coliform bacteria and *E. coli* until the agency approves the *E. coli* limitations as stated in the revised New Mexico Water Quality Standards. The permittee may discontinue fecal coliform bacteria monitoring when the Region approves the water quality standard for *E. coli*, at which point the water quality standard will effectively replace the fecal coliform parameter within the document and update the Water Quality Management Plan.

*3 *E. coli* bacteria is included in this permit as a result of the revised New Mexico Water Quality Standards as amended through February 16, 2006.

*4 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting through one (1) day prior to six (6) months from the effective date of the permit.

*5 The permittee shall use only the State of New Mexico approved analytical methods as required by 20.6.4.14 NMAC, revised State of New Mexico Water Quality Standards as amended through February 16, 2006. The latest edition of Standard Methods, 20th Edition, contains methods for E. coli bacteria analysis 9221-E and 9221-F that are consistent with the State of New Mexico approved analytical methods for wastewater. The permittee may use these methods for E. coli analysis for wastewater until the time EPA approves the proposed 40 CFR 136 methods (Colilert, Colilert-18, m-ColiBlue 24, membrane filter method). At that time, all the aforementioned methods will be acceptable.

*6 Requirements for this parameter are effective during the period beginning six (6) months from the effective date of the permit and lasting through the expiration date of the permit.

*7 For any reporting period, samples shall be taken at least ten (10) days from the first sample of the previous reporting period.

*8 Prior to final disposal, the effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40CFR136. If during the term of this permit the practical quantification limit for TRC becomes less than 11 µg/L , then 11 µg/L shall become the effluent limit. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

*9 Permit term shall be from the permit effective date to the permit expiration date. The discharge shall be tested between the first period between November 1 and April 30 after the permit effective date.

*10 This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple test failures. However, upon failure of any WET test, the permittee must report the test results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any. (See Part II, Section D)

*11 Flow measurements shall be taken with no less than 24 hours between each measurement event.

SECTION B. COMPLIANCE SCHEDULES.

None.

SECTION C. MONITORING AND REPORTING (MINOR DISCHARGERS).

Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of the reporting period.

1. Reporting periods shall end on the last day of the months March, June, September, and December.

2. The permittee is required to submit regular quarterly reports as described above postmarked no later than the 28th day of the month following each reporting period.

3. If any 7-day average or daily maximum value exceeds the effluent limitations specified in Part I.A, the permittee shall report the excursion in accordance with the requirements of Part III.D.

4. Any 30-day average, 7-day average, or daily maximum value reported in the required Discharge Monitoring Report which is in excess of the effluent limitation specified in Part I.A shall constitute evidence of violation of such effluent limitation and of this permit.

5. Other measurements of oxygen demand (e.g., TOC and COD) may be substituted for five-day Biochemical Oxygen Demand (BOD5) or for five-day Carbonaceous Biochemical Oxygen Demand (CBOD5), as applicable, where the permittee can demonstrate long-term correlation of the method with BOD5 or CBOD5 values, as applicable. Details of the correlation procedures used must be submitted and prior approval granted by the permitting authority for this procedure to be acceptable. Data reported must also include evidence to show that the proper correlation continues to exist after approval.

6. NO DISCHARGE REPORTING
   If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

SECTION D. OVERFLOW REPORTING.

The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary).

Overflows that endanger health or the environment shall be orally reported at (214) 665-6595, and NMED Surface Water Quality Bureau at (505) 827-0187, within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows that endanger health or the environment shall be provided to EPA and the NMED Surface Water Quality Bureau within 5 days of the time the permittee becomes aware of the circumstance.

SECTION E. POLLUTION PREVENTION REQUIREMENTS.

1. The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing one) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:

   (A.) The influent loadings, flow and design capacity;
   (B.) The effluent quality and plant performance;
   (C.) The age and expected life of the wastewater treatment facility's equipment;
   (D.) Bypasses and overflows of the tributary sewerage system and treatment works;
   (E.) New developments at the facility;
   (F.) Operator certification and training plans and status;
   (G.) The financial status of the facility;
   (H.) Preventative maintenance programs and equipment conditions and;
   (I.) An overall evaluation of conditions at the facility.

PART II - OTHER CONDITIONS

A. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, and concurrently to NMED within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

TRC
E. coli bacteria
Fecal coliform bacteria

B. PERMIT MODIFICATION AND REOPENER

In accordance with 40 CFR122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, new or revised TMDL's or new State water quality standards are established and/or remanded by the New Mexico Water Quality Control Commission.

In accordance with 40 CFR Part 122.62 (s) (2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

C. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   (a.) Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

   (b.) Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

   (c.) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   (d.) Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

(e.) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves the alternate temperature limit;

(f.) Petroleum oil, non biodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through;

(g.) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

(h.) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403. The permittee shall provide adequate notice of the following:

(a.) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants; and

(b.) Any substantial change in the volume or character of pollutants being introduced into the treatment works.

(c.) Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of such change in the quality or quantity of effluent to be discharged from the publicly owned treatment works.

D. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC FRESHWATER)

1. SCOPE AND METHODOLOGY

(a.) The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S):	001
REPORTED ON DMR AS FINAL OUTFALL:	001
CRITICAL DILUTION (%):	100%
EFFLUENT DILUTION SERIES (%):	32, 42, 56, 75, 100

GRAB SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA/600/4-91/002 or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA/600/4-91/002, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

(b.) The NOEC (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.

(c.) This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

(d.) Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. REQUIRED TOXICITY TESTING CONDITIONS

(a.) Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.

iii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the growth and survival endpoints of the Fathead minnow test.

iv. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for the growth and survival endpoints of the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

(b.) Statistical Interpretation

i. For the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/600/4-91/002 or the most recent update thereof.

ii. If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

(c.) Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;

(A.) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

(B.) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 2.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(A.) a synthetic dilution water control which fulfills the test acceptance requirements of Item 2.a was run concurrently with the receiving water control

(B.) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C.) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3 below; and

(D.) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

(d.) Samples

i. The permittee shall collect a minimum of three grab samples from the outfall(s) listed at Item 1.a above.

ii. The permittee shall collect second and third grab samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the grab samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the grab samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first grab sample. Samples shall be chilled to 4 degrees Centigrade during collection, shipping, and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent grab sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days.

v. The effluent grab sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 3 of this section.

3. REPORTING

(a.) The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA/600/4-90/027F, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.

(b.) A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review with an accompanying letter describing corrective actions taken.

(c.) Within 10 days of receiving notice of failure of the survival endpoint in a test, the permittee must provide written notification to EPA.

(d.) The permittee shall report the following results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.

i. Pimephales promelas (Fathead Minnow)

(A.) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.

(B.) Report the NOEC value for survival, Parameter No. TOP6C.

(C.) Report the NOEC value for growth, Parameter No. TPP6C.

(D.) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.

(E.) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia

(A.) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.

(B.) Report the NOEC value for survival, Parameter No. TOP3B.

(C.) Report the NOEC value for reproduction, Parameter No. TPP3B.

(D.) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.

(E.) Report the higher (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.